

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Yukio NISHIKAWA et al.

Group Art Unit: 1775

Serial No.: 09/989,139

Examiner: Michael E. La Villa

Filed: November 21, 2001

**For: MAGNESIUM ALLOY MOLDED PRODUCT AND METHOD FOR
MANUFACTURING THE SAME**

AMENDMENT UNDER 37 CFR 1.111

MAIL STOP NON-FEE

AMENDMENT

Commissioner for Patents

P. O. Box 1450

Alexandria, Virginia 22313-1450

Sir:

**In reply to the Office Action mailed April 9, 2003,
please undertake the following changes:**

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4. (Withdrawn) The magnesium alloy molded product according to claim 2, wherein said aluminum layer has a thickness of 0.1 to 500 μm .

5. (Withdrawn) The magnesium alloy molded product according to claim 2, wherein a transparent painted film is formed on a surface of said anticorrosive coating layer.

6. (Withdrawn) A method for manufacturing a magnesium alloy molded product, comprising the steps of:

molding a magnesium alloy;

forming an aluminum layer on a surface of an obtained magnesium alloy molded body; and

chemically treating said magnesium alloy molded body, on which said aluminum layer has been formed, to form an anticorrosive coating layer producing an interference color on the surface of said aluminum layer.

7. (Withdrawn) A method for manufacturing a magnesium alloy molded product, comprising the steps of:

forming a joined sheet consisting of a magnesium alloy sheet and an aluminum sheet,

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processing said joined sheet into a desired shape, and chemically treating said molded joined sheet to form an anticorrosive coating layer producing an interference color on a surface of said aluminum sheet.

8. (Withdrawn) The method for manufacturing a magnesium alloy molded product according to claim 6, further comprising a step of forming a transparent painted film on a surface of said anticorrosive coating layer after the step of forming said anticorrosive coating layer.

9. (Withdrawn) The method for manufacturing a magnesium alloy molded product according to claim 7, further comprising a step of forming a transparent painted film on a surface of said anticorrosive coating layer after the step of forming said anticorrosive coating layer.

10. (Currently Amended) A magnesium alloy molded product having a brilliant anticorrosive structure, comprising

a magnesium alloy molded body having a ~~cut surface of a desired shape~~ portion where a skin of the magnesium alloy is exposed,

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a transparent anticorrosive film consisting of an organic acid amine salt and formed at least on said ~~cut surface~~ portion, and

a transparent painted film formed on said transparent anticorrosive film.

11. (Original) The magnesium alloy molded product having a brilliant anticorrosive structure according to claim 10, wherein said transparent painted film is composed mainly of a thermosetting organic resin.

12. (Original) The magnesium alloy molded product having a brilliant anticorrosive structure according to claim 10, wherein said transparent painted film is composed mainly of an ultraviolet-curing organic resin.

13. (Withdrawn) A method for manufacturing a magnesium alloy molded product having a brilliant anticorrosive structure, comprising the steps of:

forming at least a painted film on a magnesium alloy molded body;

forming a cut surface by cutting at least a part of said painted film;

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exposing a magnesium alloy molded body to an aqueous solution of an organic amine salt after said cutting step;

forming a transparent anticorrosive film at least on said cut surface by water rinsing and drying said magnesium alloy molded body exposed to said aqueous solution of an organic amine salt; and

forming a transparent painted film by applying and solidifying a solution of a transparent resin.

14. (Withdrawn) An arrangement for manufacturing a magnesium alloy molded product, which is an arrangement for forming a transparent anticorrosive film for a magnesium alloy molded product having a brilliant anticorrosive structure,

said arrangement comprising:

a first unit for exposing a magnesium alloy molded body on which a cut surface has been formed to an aqueous solution of an organic acid amine salt;

a second unit for removing an excessive aqueous solution of said organic acid amine salt from said magnesium alloy molded body by rinsing with water;

a third unit for water swishing and drying said magnesium alloy molded body; and

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a conveyer unit for conveying said magnesium alloy -
molded body sequentially from said first unit through said
second unit to said third unit.

15. (Withdrawn) The arrangement for manufacturing a
magnesium alloy molded product according to claim 14, wherein
said first unit is constituted to immerse said magnesium alloy
molded body in an immersion tank thereof filled with the
aqueous solution of a organic acid amine salt.

16. (Withdrawn) The arrangement for manufacturing a
magnesium alloy molded product according to claim 14, wherein
said conveyer unit is constituted to transfer said magnesium
alloy molded body substantially horizontally to said first
unit, said second unit and said third unit in order.

17. (Withdrawn) The arrangement for manufacturing a
magnesium alloy molded product according to claim 16, wherein
said first unit is constituted to drop an aqueous solution of
an organic acid amine salt onto said magnesium alloy molded
body from above.

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a transparent painted film formed on said transparent anticorrosive film.

20. (Original) The casing according to claim 19, wherein said casing composed of said magnesium alloy molded body having a brilliant anticorrosive structure is a casing of a portable audio apparatus.

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18. (Withdrawn) An arrangement for manufacturing a magnesium alloy molded product, which is an arrangement for forming a transparent anticorrosive film for a magnesium alloy molded product having a brilliant anticorrosive structure,

said arrangement comprising:

a turntable that can receive thereon a magnesium alloy molded body having a cut surface formed thereon;

an ejecting nozzle disposed perpendicularly above said turntable and ejecting an aqueous solution of an organic acid amine salt onto said magnesium alloy molded body, and

a spray nozzle disposed perpendicularly above said turntable and spraying rinsing water onto said magnesium alloy molded body.

19. (Currently Amended) A casing of an apparatus, composed of a magnesium alloy molded body having a brilliant anticorrosive structure, said casing comprising:

a magnesium alloy molded body having a ~~cut surface of a~~
~~desired shape~~ portion where a skin of the magnesium alloy is
exposed;

a transparent anticorrosive film consisting of an organic acid amine salt formed at least on said ~~cut surface~~ portion;
and

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a transparent painted film formed on said transparent anticorrosive film.

20. (Original) The casing according to claim 19, wherein said casing composed of said magnesium alloy molded body having a brilliant anticorrosive structure is a casing of a portable audio apparatus.